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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,895	12/02/2003	Alexander I. Wallstein	27855/39300	3382

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EXAMINER

LEE, JONG SUK

ART UNIT PAPER NUMBER

3673

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/725,895

Applicant(s)

WALLSTEIN ET AL.

Examiner

Jong-Suk (James) Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/5/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on June 18, 2004. These drawings are formal and acceptable.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 10-15, 18, 20-25, 27-31, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Tyrell et al (US 4,596,496).

Tyrell et al discloses a mine roof supporting truss system and method of forming the system, the system comprising a pair of spaced apart inclined bolts (14); a horizontal bolt (44) having a pair of ends; a pair of truss shoes (22, 50), each of the truss shoe for use on a mine roof truss having at least one inclined bolt (14) and at least one horizontal bolt (32, 44), the truss shoe comprising: a base (22, 24), the base including a first end, a second end, a first side and a second side extending between the first and second ends, a generally planar bearing surface, and a top side disposed opposite the bearing surface, the bearing surface arranged for contact with the

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mine roof via a roof support plate (72); a stanchion (26) formed on the top side, the stanchion including a bore (28) extending from a top end of the stanchion through the bearing surface, the bore sized to receive the inclined bolt; a bracket (22, 30) formed on the top side, the bracket including a laterally extending slotted bore sized to receive the horizontal bolt (32); and a portion of the first end and a portion of the first side cooperating to form a curved edge, wherein the top end of the stanchion including a recessed seat (56), such as conical, spherical, wherein the bore of the stanchion is disposed at an angle relative to a plane of the bearing surface, wherein the slotted bore of the bracket including an axis disposed generally parallel to the plane of the bearing surface, wherein the slotted bore of the bracket including a recessed seat (30, 54), such as spherical, wherein the bore of the stanchion terminates in a slot formed on the bearing surface, wherein the horizontal bolt comprises two sections, and further including a coupler (46) for joining the two sections, the slotted bore of the bracket including a retaining lip/end portion of the top angle block (22) of the bracket as depicted in Fig. 3 (see Figs. 1-10; col.3, lines 34-68; col.4, lines 1-68; col.5, lines 1-46).

4. Claims 1-6, 10-15, 18, 20-25, 27-31, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by White (US 4,749,310).

White discloses a mine roof supporting truss system and method of forming the system, the system comprising a pair of spaced apart inclined bolts (16); a horizontal bolt (70) having a pair of ends; a pair of truss shoes (20), each of the truss shoe for use on a mine roof truss having at least one inclined bolt (16) and at least one horizontal bolt (70), the truss shoe comprising: a base (36), the base including a first end, a second end, a first side and a second side extending

between the first and second ends, a generally planar bearing surface, and a top side disposed opposite the bearing surface, the bearing surface arranged for contact with the mine roof via a roof support plate (26); a stanchion (44) formed on the top side, the stanchion including a bore (52) extending from a top end of the stanchion through the bearing surface, the bore sized to receive the inclined bolt; a bracket (34) formed on the top side, the bracket including a laterally extending slotted bore sized to receive the horizontal bolt (70); and a portion of the first end and a portion of the first side cooperating to form a curved edge, wherein the top end of the stanchion including a recessed seat (60), such as conical, spherical, wherein the bore of the stanchion is disposed at an angle relative to a plane of the bearing surface, wherein the slotted bore of the bracket including an axis disposed generally parallel to the plane of the bearing surface, wherein the slotted bore of the bracket including a recessed seat (64), such as spherical, wherein the bore of the stanchion terminates in a slot formed on the bearing surface, wherein the horizontal bolt comprises two sections, and further including a coupler (78) for joining the two sections, the slotted bore of the bracket including a retaining lip/stop (68) of the bracket as depicted in Fig. 4 (see Figs. 1-7; col.2, lines 36-68; col.3, lines 1-68; col.4, lines 1-37).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7-9, 16, 17, 19, 26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyell et al in view of Seegmiller (US 5,026,217). The teachings of Tyell et al have been discussed above.

However, Tyell et al fails to disclose or fairly suggest the slotted bore of the bracket being J-shaped.

Seegmiller discloses a mine roof support truss including a truss shoe having a bracket (24-26) having J-shaped slotted bore as depicted in Figs. 4-6 (see col.4, lines 18-32).

Therefore, in view of Seegmiller, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the slotted bore of the bracket of Tyell et al by incorporating the J-shaped curve in order to enhance the holding grip for the horizontal bolt assembly.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other references cited disclose a mine strata support system, a tension cable truss support system and a roof support truss.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jong-Suk (James) Lee whose telephone number is (571) 272-7044. The examiner can normally be reached on 6:30 am to 3:00 pm, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Jong-Suk (James) Lee**  
**Primary Examiner**  
**Art Unit 3673**

/jjl  
December 9, 2005